DOCUMENT RESUME

ED 090 640 EA 006 085

AUTHOR Mueler, Ernest H.
TITLE Feasibility Study--Fiscal Baseline. A Simulation Notebook.
PUB DATE May 74
NOTE 28p.; Paper presented at National Seminar on Year-Round Education (6th, Chicago, Illinois, April 30-May 3, 1974)

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *Budgeting; Case Studies; *Cost Effectiveness; *Extended School Year; Feasibility Studies; *Financial Policy; Middle Schools; Resource Allocations; School Districts; Seminars; Simulation; *Year Round Schools

ABSTRACT

To provide a framework for consideration and the elements of a basic fiscal design on which a formal fiscal study could be developed, this document narrates a simulated case study covering the major elements and issues inherent in the fiscal analysis of a rescheduled school year as they might appear in any school district. Subjects considered include the duty of the fiscal research agents, a time schedule for cost evaluations of the rescheduled school year plan, a proposed procedure for determining costs, data requirements for a cost evaluation, the impact of the rescheduled school year plan on school operations, and resource utilization. (Author/DN)

ED 090640

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

FEASIBILITY STUDY - FISCAL BASELINE

A SIMULATION NOTEBOOK

PRESENTED AT

6TH NATIONAL SEMINAR ON YEAR-ROUND EDUCATION

CHICAGO, ILLINOIS

APRIL 30 - MAY 3, 1974

by

ERNEST H. MUELER
ASSISTANT SUPERINTENDENT
FOR ADMINISTRATION

THE COUNTY SCHOOL BOARD
PRINCE WILLIAM COUNTY
P. O. Box 389
Manassas, Virginia 22110

EA 006 085

INTRODUCTION

The Fiscal Baseline is a narrative presentation of a simulated case study. Specific major elements and issues inherent in the fiscal analysis of a rescheduled school year are illustrated as they might appear in any school district.

Readers are encouraged to envision their own school setting in the atmosphere of a fiscal analysis of a rescheduled school year program and to apply their innovativeness to the major issues and obstacles indicated. No attempt is made in the narrative description to present a complete fiscal design. It is meant to provide a framework for consideration and the elements of a basic design upon which a formal fiscal study can be developed.

Credits:

The Prince William County School/Community and Education Turnkey Inc. were instrumental in the development of this material.

FISCAL BASELINE

The Rescheduled School Year

A SIMULATED CASE STUDY

Fred Black looked at the members of his administrative cabinet and waited for their reaction to the proposed school construction bond program that he had just handed to them. While waiting for their response, Fred began to review the events of the past three years.

As superintendent of the rapidly growing Pointed Peak School District, Fred had received school board permission to operate a rescheduled school year program. The program was initiated in the Plains section of the district where student growth was outstripping the district's housing and school construction capacity.

The school board had presented the Plains community with the prospect of split shifts for a period of two to three years while schools were being constructed to house the enrollment increases. The communities' negative feeling towards split shift was well known, and the school board was anxious to avoid the impending conflict.

As an immediate solution, the school administration and staff had suggested a rescheduled school calendar as a means of offsetting the need for split shifts. One-third more students could be housed in the existing facilities under a rescheduled calendar, and this

would provide sufficient space for the student growth expected in the next three years.

The school board directed the school administration and staff to prepare a rescheduled school calendar and present it to the Plains community for their consideration. The ensuing events were quite vividly etched in Fred's memory. Program planning, information development, staff and community discussions and a seemingly endless number of difficult questions to answer. The trying period of program development and implementation was not one that Fred was soon to forget.

One particularly difficult problem of that period in the development of the rescheduled school year was the absolute dearth of substantive data regarding the program's impact on the educational process. Positions taken by proponents of the plan, that the rescheduled school year would be an economical undertaking and that achievement would be enhanced, were difficult to factually substantiate. Charges by opponents, that educational costs would skyrocket and student achievement would be hindered, were difficult to refute.

The proponents of the program appeared to be in the majority and after a herculean development and information effort on the part of the staff and community, the rescheduled school year program was initiated in the Plains area of the school district.

The school board and staff knew that a detailed analysis of the intricacies of the rescheduled school year would have to be initiated if the program were expected to receive widespread creditability and acceptance. Fred and his administrative cabinet suggested that a

thorough evaluation of the program be undertaken to investigate some of the unknown qualities of the program and provide substantive answers to the never ending speculation.

During the process of implementing the rescheduled school year program, the school board, administration, and staff became acutely aware of the need for external and internal validity for data development and for positions taken. With this point in mind, Fred and the administrative cabinet recommended that agencies outside the school organization be selected to undertake the analysis of the rescheduled school year.

The problems of creditability had become a major concern during the rescheduled school year program implementation. The research department of the school board came under severe attack for the method of attitude analysi they had utilized in assessing the communities' attitudes towards the program. The research department's approach and data were validated by expert sources external to the school, but Fred was reluctant to again jeopardize the department in the fiscal analysis. To offset the possibility of this occurring, Fred designated a member of the administrative cabinet to chair the development of a fiscal study and the selection of a fiscal research agent.

Even the process of selecting the agencies to do the evaluation was a matter of controversy and suspicion. The situation reached its peak when a legal attempt was made to enjoin the school board from retaining agents to do the study. The court upheld the school board in the matter, and the evaluation design took shape.

Fred and his staff knew that to produce creditable data they had to take great precautions to insure the selection and retention of the most competent, reliable, and unreproachable agents possible. A screening committee was established to review qualifications of prospective fiscal analysts and their proposed cost models. To insure that the screening committee was doing its job properly, advice and recommendations were solicited from a variety of known research experts. Advice was sought as to the design of the evaluation and to recommendations of qualified, competent researchers.

Proposals from a number of private research agents and agencies and universities were reviewed by the committee. The final selection was a nationally known fiscal research firm. At that time, the firm was engaged in government sponsored education project fiscal evaluation and was considered eminently qualified and reliable. The cost model proposed by the research firm was developed under a federal research grant and was generally accepted as a reliable instrument.

Going one step further to insure a reliable, creditable product, Fred and his staff added an auditing agent to monitor the activities of the fiscal research agency. The auditing responsibility was jointly shared by personnel of the department of education of the state university and the education research office of the state education department.

Preliminary guidelines and responsibilities established for the fiscal research agency included the following elements:

1. Distribution of standards and basic information dissemination.

2. Agency was to be responsible for personal community contacts.
3. Formal reports were to be presented to various community groups.
4. Regularly scheduled press conferences were to be an integral aspect of the project.
5. The agency was to be responsible for a set number of interim reports, a final report, and the update of the survey at a specified date.
6. The development of in-house capability to insure the potential for the continuous evaluation of the project's progress was to be the fiscal agent's responsibility.
7. The establishment of a formal time line for the development, testing, and acceptance of the evaluative instrument also was the agent's responsibility.

As the preliminary guidelines were developed and accepted, the specific working data production instruments also had to be generated. The problems experienced between the theoretical development of a research design and the actual data development were found to be considerable.

Early indications were that staff resistance to the responsibility for data collection was directly related to the degree of involvement in the research design development and to the degree of acceptance of the value of the data to be collected. Fred and the administrative cabinet felt that success in the fiscal analysis was directly dependent on staff support.

The tendency toward negativism created when organization personnel perceived themselves to be displaced or uninvolved was well documented. Fred knew that negativism of this type could undo a program with little regard for program quality or value. He believed that if the data produced was not viewed as credible by the staff it could never be presented in a believable fashion to the public.

To insure a positive outcome plus enthusiasm from the staff, the research design was altered to produce staff sensitivity toward and understanding of the undertaking. Small and large group sessions were held by the research agents with an emphasis on securing staff understanding and support.

Information was presented and staff suggestions as to the elements to be contained in the study as well as suggestions for procedural approaches to obtaining and treatment of data were solicited. Several interrelated outcomes were desired; the development of expert status for the staff regarding knowledge and insight into the research, and public commitment to the program by all to insure widespread credibility for the project.

When the fiscal research agents had received staff input, a general study design was produced. The design was critically evaluated by staff and the auditing agents and alterations were made.

Finally a formal study design containing all elements to be reviewed, the statistical treatment to be used, the methods of data collection to be used, the time line for completion of each element and the cost of the undertaking was presented to the school board for review and approval. The final contract included the following elements. See Exhibit A.

Exhibit A

The fiscal research agents were:

1. To analyze two instructional programs, one operating on a 12-month basis and one on the conventional 9 1/2-month basis, at either the elementary or secondary level. The Superintendent will be responsible for selecting the specific grade level and the typical school.
2. To provide all standard reports described in the Cost of Education Analysis Model, which is made a part of this contract.
   a. Analysis Summary - will give at a glance results for comparing programs' total per-pupil costs.
   b. Data Authorization Listing - a listing of the data inputs which were used to construct each of the Cost-Ed Models.
   c. Economic Structure Analysis - detailed breakdowns of the total costs given in the Analysis Summaries, including subtotals at various computation levels.
   d. Sensitivity Analysis - detailed analysis of the impacts of each of the relevant cost factors on total costs.
   e. Economic Factor Ranking - presents key economic factors ranked according to their "relative power" to affect total costs.
3. To provide, for each Model built, 15 special analyses, including trade-offs and sensitivities, upon request by the Superintendent.

4. To provide a summary and interpretive narrative of the results of the economic analysis.
5. To provide a report and brief narrative to the School Board and/or interested citizens on the Economic Factor Ranking and prior computer reports within 10 days of verification by the Superintendent.
6. To draft and present a final report, including a briefing, to the School Board, the Superintendent, and his designees.
7. To conduct two press conferences at a site chosen by the Board of Education, one at the completion of the Economic Factor Ranking Analysis and one at the completion of the overall analysis.
8. To provide on-the-job training to one member of the Pointed Peak Schools administrative staff in a manner such that the staff member will be capable of interpreting and utilizing the Cost-Ed reports and analysis for management and interpretive purposes.
9. To withhold release of the results of the project until approved by the Pointed Peak School Board.

The Superintendent or his designee agrees to perform the following services to insure the timely delivery of the above final products:

1. To gather all source documents, as requested by the fiscal research agent, including budgets, test scores, blueprints of specific schools, class size, teachers' salaries, administrative personnel, textbook expenditures, and other factors contributing to total costs and make them available on a mutually agreed upon schedule.

2. To verify and validate data inputs which are questionable or are determined to be questionable by the fiscal research agent.
3. To provide all necessary assistance to insure the availability, validity, and reliability of data.
4. To provide for and make arrangements for facilitating press conferences and public briefings to be conducted by the fiscal research agent.

While the final contract form was being reviewed, the selection of comparison schools was actively pursued. Representatives of the various educational levels were anxious to have their respective levels considered in the fiscal analysis. Fred recognized that the limited resources provided for the study could not be stretched to cover an analysis of all three levels. He also recognized that questions regarding the fiscal impact of the rescheduled school year on the elementary, middle, and senior high school levels would continue to be voiced unless the data from the one level to be studied could be applied to the other levels. Agreement was reached between the research agents, the staff, and the auditing agents that the middle school would produce data most readily applicable to the other two levels.

For fiscal comparison purposes, the decision was made to select a middle school operating on the rescheduled school year program and to simulate the cost of a 9-month - 3-month school program in the same building. The rationale applied was that the variables which existed in two different schools would be virtually impossible to accurately replicate and hold constant. Using the same school in the comparison the variables of age of building, use of equipment, competency of teachers, type of equipment, heating plants, program, etc., would be constant and would not distort the outcomes for either the rescheduled or the conventional school programs.

A reason for selecting a rescheduled school year middle school instead of a conventional middle school for the study was that no

comparative data existed on rescheduled school year costs while years and years of data and experience regarding the fiscal analysis of conventional schools existed. The belief was that simulating the financial costs of a conventional program would be easier and more reliable than simulating the cost of a rescheduled school year program.

The resolution of the aforementioned basic elements of the study design was followed by the establishment of a time schedule and deadlines for submission of data. See Exhibit B.

Preliminary data materials collected were general in nature and each phase of the collection process was followed up by personal interviews between the fiscal research agents and the data collectors. See Exhibits C, D, E.

The follow up sessions led to more detailed specific questions designed to insure that each element that existed in the conventional program was identified along with the cost attached to it and the same was developed for the rescheduled program. See Exhibit F.

Verifications of costs and program changes were sought from many quarters internal and external to the school organization. Equipment and materials manufacturers were questioned as to accurateness of data regarding their products and state and local agencies were contacted for verification of information that concerned them.

As the data was collected, copies of all materials were forwarded to the auditing agents for their review. Periodically, as the fiscal research agent presented interim reports, the auditing agents met with the fiscal agent and the Pointed Peak study committee and each group

 Text continued on page 20

Exhibit B

TIME SCHEDULE FOR COSTING COMPONENT OF POINTED PEAK SCHOOL DISTRICT EVALUATION OF THE RESCHEDULED SCHOOL YEAR PLAN

1971 December	1 - 10	Selection of School for Cost-Ed Modelling of the Rescheduled School Year
	1 - 15	Gathering of District Wide Administrative Data
	16 - 31	Initial Contact with Principal of School Selected for the Study; Preliminary Data Gathering of School Specific Data
1972 January	1 - 15	Continued Collection of School Specific Data, Including Data on Previous Operation as a Traditional Term School
	16 - 31	Refinement and Verification of All Data; Certification of Data by the Accountability Agents
1972 February	1 - 20	Preliminary Construction of the Models; Listing of All Assumptions and Calculations Necessary Before Models May Be Run on Computer
	21 - 29	Intensive Training of Pointed Peak School District Personnel Covering All Elements of the Construction of the Cost-Ed Models
1972 March	1 - 31	Production of Cost-Ed Models
1972 April	1 - 15	Presentation of Preliminary Results (Press Conference)
	1 - 30	Production of Draft Report with Close Cooperation of Pointed Peak Personnel
1972 May	1 - 15	Production of Final Report
	16 - 31	Presentation of Final Report (Press Conference)

Exhibit C

PROPOSED PROCEDURE FOR DETERMINING COSTS OF OPERATING THE SELECTED RESCHEDULED SCHOOL YEAR SCHOOL ON THE PREVIOUS TRADITIONAL TERM BASIS

1. Obtain last year's budget.

2. Obtain last year's salary schedule for all staff.
   (a) Determine how much of the increase in salary for each staff member is due to longetivity or upgrading.
   (b) Determine how much is due to the longer contract.

3. Obtain last year's schedule of classes, especially to determine how class size (reflected in employment levels) has changed in moving from the traditional term to rescheduled school year.

4. Obtain operations and maintenance schedules for the current rescheduled school year operation and for either last year's traditional term or for a similar school in the district currently run on a traditional term.
   (a) Determine how the move to rescheduled school year affected these schedules.
   (b) Determine the effect on operating and maintenance expenses of any observed changes.

5. Determine how the physical plant of the selected school was modified for moving to rescheduled school year.
   (a) If air conditioning was added, price this addition.
   (b) If no air conditioning was necessary, it might be desirable to consider estimating the increase in cost necessary if it were a needed addition, especially if most of the existing schools now on traditional terms would require air conditioning to move to the rescheduled school year.

6. Search for any other changes in operating procedures or mixes of resources that resulted from the move to the rescheduled school year.
   (a) Were there any administrative changes required that would be of a permanent or long-term nature (e.g. increased expense for handling multi-forms of teacher contracts)?
   (b) What costs does the school system incur for having more pupils on vacation in winter months (e.g. increased winter recreation facilities)?
   (c) Any changes in useful lives of facilities or materials because of year-round use and shorter time for repair or renovation?

Exhibit D

DISTRICT DATA REQUIREMENTS FOR COST-ED

1. District Directory
2. School Year Calendar (instructional days and in-service days)
3. Current School Budget
4. District Enrollment, by School, by Grade (within each school)
5. Copy of Teacher's Agreement
6. District Square Footage, by Building
7. Statement of Value of All District Building and Contents at Replacement Costs (possibly from insurance records)
8. Statement of expected useful life and square foot replacement costs of each building
9. Statement of expected maturities and interest rates for debt financing (district bond rating)
10. Inventory of Equipment Used in Administrative Offices
11. Statement of expected useful life of office equipment used in Administrative Offices
12. Staff Rosters with Salaries for all personnel (instructional and non-instructional) in each school
13. Scaled Floor Plan of each school
14. Inventories of Audio-Visual Equipment in each school
15. Inventories of Office Equipment in each school
16. Statement of expected useful lives of all Audio-Visual and Office Equipment in each school
17. Master Schedule of Teachers and Rooms from each school
18. Typical Schedules of students in each school

Exhibit E

COST-ED DATA FROM SCHOOL PRINCIPALS

1. School enrollment, by grade

2. Staff Roster of all school personnel, including notation of personnel which are part-time (%) or shared with other schools (%)

3. Bell schedule, including times when teachers arrive and depart

4. Master schedule of teachers and rooms

5. Typical schedule of student (including teacher and room for each subject); or a weekly or daily time allotment by subject

6. The number of students enrolled in each class, recess period, P.E. class, lunch period, and homeroom

7. For each time period on student schedule, the types of staff, facilities and materials which are used

8. Use of aides within the school, including time spent in student contact activities and other duties, total hours per day, and work weeks per year

9. Supervision of Recess, including staff types used (teacher, recess aide, etc.), and facilities used

10. Supervision of Lunch, including staff types used (teacher, lunchroom matron, etc.), facilities used, percent of period which each staff and facility type is utilized. The percent of the period students spent in each facility is important.

11. Supervision of Physical Education, including staff types used, (P.E. teacher, regular classroom teacher, P.E. consultant, etc.) and facilities used (outdoors, gymnasium, classroom, etc.)

12. Supervision of students before or after school

13. If possible, Duty Rosters for hall duty, recess duty, lunch duty, etc.

14. The average number of hours spent by a typical teacher beyond the normal school day, in lesson preparation, test grading, etc.

15. Percent of students engaged in extra-curricular activities and the average time spent by participants

16. Extra money paid staff members for special duties, such as supervising on extra-curricular activity

Exhibit E

17. The number of students using school-provided transportation and the average length of time spent waiting for buses at school and riding buses. Also, means of supervision of students while waiting

18. Statement of the normal work day for non-teaching staff members

19. The work weeks per year for the principal, secretaries, counsellors, and other non-teaching personnel

20. Existence of Portable Classrooms, including the number, approximate size, and kind of use

21. Use of school facilities beyond the normal school day (including summer school, recreation sports, PTA meetings, dances, breakfast program, community school, etc.)

Activity	Building Area Used	Wks/Yr.	Days/Wk.	Hrs./Day

Exhibit F

IMPACT OF THE RESCHEDULED SCHOOL YEAR PLAN ON SCHOOL OPERATIONS

During the cost analysis of the on going rescheduled school year program at Blair School, a number of questions have been formulated concerning the impact that such a program has had on the operation of this school. Additionally, a number of questions have arisen concerning the impact of such a plan on the district as a whole. The following is a preliminary list of these questions which will serve as the starting point for the development of the Cost-Ed model of a hypothetical Blair program, a program similar in academic content to that of the current Blair program but run on a traditional term basis.

Air Conditioning

Approximately how much less would Blair Middle School have cost if it had been constructed without air conditioning?

Would other Pointed Peak Schools be air conditioned for the traditional term?

Pupil Transportation

Since Blair Middle School under the rescheduled year would have 1/3 more students than under a traditional term, presumably the rescheduled year would serve an area approximately 1/3 larger than the traditional term. Does neighborhood color grouping offset this tendency toward longer bus routes or are more buses necessary to serve the larger area? Does current experience indicate that per-pupil expenditures will be higher or lower for the rescheduled year than for the traditional term and by how much?

Exhibit F

Would year-round utilization of school buses result in buses wearing out faster? That is, by how much would the expected useful lifetime of a school bus be decreased due to the rescheduled school year?

Maintenance of Building

Would total maintenance salaries go up due to the rescheduled year? Does current experience indicate that much maintenance must be scheduled at night, possibly incurring overtime or late shift labor premiums? By how much (if at all) would total maintenance salaries be increased due to the rescheduled year?

Operations

By what percent did the C.Y. 1971 utilities costs (heat, electricity, water, gas, trash removal) for Blair Middle School, exceed the expected costs of utilities if Blair were on a traditional term?

How much (if at all) did the total C.Y. 1971 custodial costs (salaries and supplies) for Blair exceed the expected custodial costs if Blair were on a traditional term?

Personnel

If Blair Middle School were run on a traditional term (with its design capacity of 1050 students) would the non-teaching staff remain the same: 1 principal, 2 assistant principals, 3 counselors, 2 librarians, 6 secretaries, 7 custodians, and 8 cafeteria workers?

How much of the salaries paid to the principal, assistant principals, and secretaries was due to their participating in the rescheduled year?

What (if any) additional district wide staff (including estimate of salary) would be necessary to service the added complexities of the rescheduled year; such as, increased kinds of teachers' contracts, etc.?

Start-Up Costs

How much funds were devoted to the evaluation of the rescheduled year, including the costs of the Evaluation Task Force?

In what budget account(s) were these funds located?

Did the curriculum development, educational in-service, and school improvement expenses at Blair for the rescheduled year during C.Y. 1971 exceed the expected expenditures if Blair were on traditional term?

By how much?

What other one-time costs of the rescheduled year have you experienced or do you expect to experience in the next five years?

What other continuing expenses of the rescheduled year have you experienced or do you expect to experience in the next five years?

reacted to the materials presented. Neither the auditing agents or the study committee could alter the content of the reports. The total input of the two groups was critical analysis and reaction. The fiscal agent retained total responsibility for the material presented in the interim and final reports.

At the conclusion of the study, the auditing agents were required to prepare a position statement on the research design, the conduct of the total research process, the statistical treatment of the data, and the validity and reliability of the outcomes. The position statements of these agents could echo those presented by the fiscal research agents or be in conflict with them.

As the cost data was being collected, analyzed, and organized, the research agents recognized the need for the development of a basic set of generalizations and assumptions. It was believed that generalizations and assumptions had to be formally stated and accepted as applicable to most if not all situations in the rescheduled school and the conventional school being simulated. If the generalizations and assumptions stated were not applicable in one situation or applied in a different manner, this information had to be obtained to insure an accurate cost analysis.

The type of generalizations and assumptions that caused difficulty in the analysis were illustrated by the problem presented when the rescheduled school year program start-up costs were analyzed. A decision had to be made to determine whether the start-up costs were applicable to the rescheduled school year only, or were equally as

applicable to the conventional program. All buildings which housed the rescheduled school year program were air conditioned for the program and the belief developed that the air conditioning cost was an inherent aspect of the rescheduled school year program. However, buildings currently under construction were being air conditioned regardless of program, indicating air conditioning was an integral part of any school program. The assumption that the cost of air conditioning was not exclusively a rescheduled school year cost was accepted. The same rationale was applied to start-up curriculum and staff developmental work as the outcomes of both undertakings would be beneficial to either the rescheduled or conventional program.

Staff members were presented with the generalizations and assumptions and their review, reaction, and revisions were requested. The list of generalizations and assumptions utilized in the study were approved by the fiscal research agent, the staff, and the auditing agents.

When the final report was completed, the fiscal agents held a school board briefing on the report and then conducted in depth sessions with staff, press, and community. The report was broken down into two major cost categories, staff and facility. Twenty-six sub categories were identified and their impact on the total per-pupil cost was calculated and compared.

The resources compared included the following elements. See Exhibit G.

Exhibit G

Teachers

Aides

Classrooms

Classroom Furnishings

Audio-Visual Equipment

Books and Audio-Visual Software

Gymnasium

Gymnasium Equipment

Cafeteria

Cafeteria Equipment

Counselors

Librarians

Library Furnishings

Library

Offices

Office Furnishings

Principal/Assistant Principals

Support Staff

Buses

District Student Support Staff

District Instructional Support Staff

District Administrative Staff

Districtwide Offices

District Office Furnishings

Coaches

Miscellaneous Supplies and Expenses

The major areas of the cost comparison, staff and facility, also were divided into the sub areas of instructional and support staff, and school buildings, furnishings and equipment.

When the middle school cost analysis was completed, the researchers applied the data to the elementary school program. They projected the elementary school cost differentials that could be produced if the rescheduled school year program was compared to the conventional program.

The final report received a great deal of public attention. The cost savings attributed to the rescheduled program and illustrated in the study were quite significant. Cost savings for staff and facilities, in operational, debt and capital expenditures were approximately 10 percent. Approximately 5 percent of the reduced costs were attributed to staff and approximately 5 percent savings in the area of facilities. The thought of freeing up 10 percent of the total funds allocated to education (funds heretofore obligated for specific purposes) for use in a new or previously unconsidered manner was an exciting prospect for Fred.

An area of the study that was of special interest to Fred and the administrative cabinet was the sensitivity-trade off analysis. The relationships of program costs to each other and to the total budget provided a unique insight into the management decision making process. Each program expenditure decision could be evaluated in terms of what the dollar cost of that program purchased compared to what the same expenditure would produce if applied to another program.

Fred and his staff studied the findings of the fiscal agent and utilized their data in the development of the school construction bond program. The total educational space and program needs of the rapidly growing Pointed Peak district were evaluated. Representatives of the school community assisted in the development of a 3- and an 8-year capital expenditure plan designed to meet Pointed Peak's educational needs.

Interrelated problems such as the changing locations of student populations and facility slack presented complex and sometimes emotional concerns. Along with the above, increased building capacity produced through the use of the rescheduled school year indicated the need for other attendance boundary realignments in order to produce optimum resource consumption. Suggestions for building use for other than classroom purposes, where population shifts had obviated the need for the classroom space, generated considerable excitement. Adding to the confusion of the public was the obscured clarity in a logic which produced a school construction referendum when consideration was being given to alternative use of classroom space. The fact that rehabilitation costs of obsolete buildings were greater than new facility construction costs and that the location of the buildings did not coincide with the location of the students had little effect on the local communities' attachment to "their" school.

Decisions as to cost factors, the timing of the rehabilitation of older schools, space additions for new programs and program alterations, the addition of air conditioning, etc., while the educational

program was in session taxed the innovativeness of the study unit. The meshing of future space needs with the scheduling of construction produced the concept of "holding schools." Entire schools, students and staff would move into a completed building while their school was being renovated. Done in phases, it was considered a feasible solution to the logistical problems produced when the requirement was to operate an educational program in a school during a construction program.

The costs of the bond program were calculated for a rescheduled school and a conventional school program. When the respective construction costs were compared, the reduction by one-third of required classroom capacity under the rescheduled school program produced a cost differential of extensive proportions. With the growth and program space need increases projected for Pointed Peak during the next 8 years, the expenditure to implement the rescheduled school year was almost one-half of what would be required under the conventional program. The actual financial saving was in the area of 40 million dollars.

Fred knew that the in-house produced school construction cost comparison study was going to be open to attack by rescheduled school year opponents regardless of the capital outlay savings indicated. He waited to hear the reactions of his administrative cabinet. Would they suggest that the topic was too volatile to be handled in house

and recommend a study by an external agent to insure credibility? He mused to himself that it seemed he had traveled this road before and wondered if the actions taken the first time down this road would apply in this instance.